EPA

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Burlington, MA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Comprehensive Assessment Information Rule

REPORTING FORM

90-930000005

EPA-OTS

0007870197W

When completed, send this form to:	For Agency Use Only:
Document Processing Center Office of Toxic Substances, TS-790 U.S. Environmental Protection Agency 401 M Street, SW Washington, DC 20460 Attention: CAIR Reporting Office	Date of Receipt: _____ Document Control Number: _____ Docket Number: _____

EPA Form 7710-52

CAIR REPORTING FORM CHECKLIST

THIS CHECKLIST IS NOT REQUIRED TO BE SUBMITTED, IT IS FOR RESPONDENT'S INTERNAL USE ONLY

This form is intended to gather information on a specific listed substance that is manufactured, imported, or processed at one facility. Respondents must answer only those sections or specific questions required in the CAIR rule.

Respondents may use the same form each time they must report. The original copy of the form received by respondents should be kept on file and used to make copies of the questions required to be answered. These copies may then be circulated to those employees who will complete the form. Respondents must submit only one copy of each question rather than compiling parts of each question from various employees and submitting them together as one question.

Respondents need only supply information on the form that is "known to or reasonably ascertainable by" the respondent. Refer to the glossary for this definition. All reports with incomplete responses will be assessed as invalid and a Notice of Noncompliance Error Letter and a copy of the question will be sent to you for completion.

Before completing any portion of this form, please read the instruction booklet. The booklet contains general instructions on how to comply with the rule, supplemental instructions and sample answers for many questions, and a glossary containing definitions of key terms. Refer to the glossary whenever an unknown term appears to examine the definition provided.

If you cannot determine your reporting obligations, you should call the TSCA Assistance Office, U.S. EPA, at (202) 554-1404. To obtain additional forms, write to the TSCA Assistance Office (TS-779), ATTN: CAIR Form Request, Office of Toxic Substances, Environmental Protection Agency, Room E-543, 401 M St., SW, Washington, DC 20460, or call at (202) 554-1404.

BEFORE RETURNING YOUR COMPLETED CAIR FORM PLEASE CHECK THE FOLLOWING:

✓ 1. **Have you completed and included Section 1 for each form you are submitting?**

✓ 2. **Have you submitted a standard chemical name and Chemical Abstract Service Registry Number for each chemical you are reporting on?**

✓ 3. **Does your submitted form include the original certification signatures as required for questions 1.06, 1.07, and 1.08?**

✓ 4. Have you submitted a completed separate form for each substance you are required to report on?

✓ 5. Have you submitted a completed separate form for each site at which you manufacture, import, or process a listed substance?

✓ 6. For each listed substance you must report on, have you reported on all activities you engage in at each site using the listed substance on the same reporting form?

✓ 7. If you are claiming information as Confidential Business Information (CBI), have you completed the CBI substantiation form in Appendix II of the form for each category containing CBI? Failure to submit a completed CBI substantiation form with a reporting form containing CBI will result in the waiver of your claim of confidentiality.

✓ 8. For each question that you are required to ansver, have you responded by either providing the data, stating not applicable ("N/A"), or, if the question permits, stating unknown ("UK")?

✓ 9. Have you right justified your responses to questions asked that require respondents to give a numeric response in a series of boxes (e.g., the answer "372" is entered as [0][0][3][7][2])?

✓ 10. Have your responses been given in alpha, numeric or alpha-numeric form such as 3 million or 3,000,000? Responses must not be given in scientific notation such as 3×10^6.

✓ 11. If you needed additional space to report the required data, have you checked the continuation sheet box at the bottom of each page that requires additional space; attached additional copies of the specific questions of this form that contain additional information; and listed the attachments in Appendix I of the reporting form?

SECTION 1 GENERAL MANUFACTURER, IMPORTER, AND PROCESSOR INFORMATION

PART A GENERAL REPORTING INFORMATION

1.01 This Comprehensive Assessment Information Rule (CAIR) Reporting Form has been completed in response to the Federal Register Notice of..... [0][6] (mo.) [1][4] (day) [8][9] (year)

CBI

[ ] a. If a Chemical Abstracts Service Number (CAS No.) is provided in the Federal Register, list the CAS No. ..... [0][0][0][5][8][4]-[8][4]-[9]

b. If a chemical substance CAS No. is not provided in the Federal Register, list either (i) the chemical name, (ii) the mixture name, or (iii) the trade name of the chemical substance as provided in the Federal Register.

(i) Chemical name as listed in the rule ..... SOLITHANE S-113:6 to 7%.

(ii) Name of mixture as listed in the rule .... _____

(iii) Trade name as listed in the rule ..... Solithane S-113:6 to 7%.

c. If a chemical category is provided in the Federal Register, report the name of the category as listed in the rule, the chemical substance CAS No. you are reporting on which falls under the listed category, and the chemical name of the substance you are reporting on which falls under the listed category.

(NA)

Name of category as listed in the rule ..... _____

CAS No. of chemical substance ..... [ ][ ][ ][ ][ ][ ]-[ ][ ]-[ ]

Name of chemical substance ..... _____

1.02 Identify your reporting status under CAIR by circling the appropriate response(s).

CBI

Manufacturer 1

[ ] Importer 2

Processor ..... (3)

X/P manufacturer reporting for customer who is a processor 4

X/P processor reporting for customer who is a processor 5

[ ] Mark (X) this box if you attach a continuation sheet.

1.03 Does the substance you are reporting on have an "x/p" designation associated with it in the above-listed Federal Register Notice?

CBI

[ ] Yes ..... [X] Go to question 1.04

No ..... [ ] Go to question 1.05

1.04 a. Do you manufacture, import, or process the listed substance and distribute it under a trade name(s) different than that listed in the Federal Register Notice? Circle the appropriate response.

CBI

[ ] Yes 1

No ..... (2)

b. Check the appropriate box below: (NA)

[ ] You have chosen to notify your customers of their reporting obligations

Provide the trade name(s) .... _____

_____

[ ] You have chosen to report for your customers

[ ] You have submitted the trade name(s) to EPA one day after the effective date of the rule in the Federal Register Notice under which you are reporting.

1.05 If you buy a trade name product and are reporting because you were notified of your reporting requirements by your trade name supplier, provide that trade name.

CBI

[ ] Trade name ..... Solithane S-113

Is the trade name product a mixture? Circle the appropriate response.

Yes ..... (1)

No 2

1.06 Certification -- The person who is responsible for the completion of this form must sign the certification statement below:

CBI

[ ] "I hereby certify that, to the best of my knowledge and belief, all information entered on this form is complete and accurate." Corrections made on 12/2/92

DINO B ISERI — NAME

[signature] — SIGNATURE

2/5/91 — DATE SIGNED

SENIOR ENVIRONMENTAL/SAFETY ENG — TITLE

(617) 229 - 3359 — TELEPHONE NO.

[ ] Mark (X) this box if you attach a continuation sheet.

1.07 Exemptions From Reporting -- If you have provided EPA or another Federal agency with the required information on a CAIR Reporting Form for the listed substance within the past 3 years, and this information is current, accurate, and complete for the time period specified in the rule, then sign the certification below. You are required to complete section 1 of this CAIR form and provide any information now required but not previously submitted. Provide a copy of any previous submissions along with your Section 1 submission.

CBI

[ ]

NA

"I hereby certify that, to the best of my knowledge and belief, all required information which I have not included in this CAIR Reporting Form has been submitted to EPA within the past 3 years and is current, accurate, and complete for the time period specified in the rule."

NAME	SIGNATURE	DATE SIGNED
TITLE	( ) - TELEPHONE NO.	DATE OF PREVIOUS SUBMISSION

1.08 CBI Certification -- If you have asserted any CBI claims in this report you must certify that the following statements truthfully and accurately apply to all of those confidentiality claims which you have asserted.

CBI

[ ]

NA

"My company has taken measures to protect the confidentiality of the information, and it will continue to take these measures; the information is not, and has not been, reasonably ascertainable by other persons (other than government bodies) by using legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding) without my company's consent; the information is not publicly available elsewhere; and disclosure of the information would cause substantial harm to my company's competitive position."

NAME	SIGNATURE	DATE SIGNED
TITLE	( ) - TELEPHONE NO.	

[ ] Mark (X) this box if you attach a continuation sheet.

PART B CORPORATE DATA

1.09 Facility Identification

CBI Name [G][E][N][E][R][A][L][ ][E][L][E][C][T][R][I][C][ ][A][E][R][O][S][P][A][C][E]

[ ] Address [P][O][ ][B][O][X][ ][5][8][8][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]
Street

[B][U][R][L][I][N][G][T][O][N][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]
City

[M][A] [0][1][8][0][3]--[ ][ ][ ][ ]
State Zip

Dun & Bradstreet Number .....[0][0]-[1][0][6]-[0][6][9][8]

EPA ID Number .....MAD.[0][0][1][0][6][0][6][9][8]

Employer ID Number .....[1][4][0][6][8][9][3][4][0]

Primary Standard Industrial Classification (SIC) Code .....[3][6][6][2]

Other SIC Code .....[ ][ ][ ][ ]

Other SIC Code .....[ ][ ][ ][ ]

1.10 Company Headquarters Identification

CBI Name [G][E][ ][C][O][R][P][O][R][A][T][E][ ][H][E][A][D][Q][U][A][R][T][E][R][S][ ]

[ ] Address [3][1][3][5][ ][E][A][S][T][ ][O][N][ ][T][U][R][N][P][I][K][E][ ][ ][ ][ ][ ]
Street

[F][A][I][R][F][I][E][L][D][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]
City

[C][T] [0][6][4][3][1]--[ ][ ][ ][ ]
State Zip

Dun & Bradstreet Number .....[0][0]-[1][3][6]-[7][9][6][0]

Employer ID Number .....[1][4][0][6][8][9][3][4][0]

[ ] Mark (X) this box if you attach a continuation sheet.

1.11 Parent Company Identification (NA)

CBI Name [ ]

[ ] Address [ ] Street

[ ] City

[ ] State [ ] Zip

Dun & Bradstreet Number .....[ ]-[ ]-[ ]

1.12 Technical Contact

CBI Name [DINO INSPIRATION]

[ ] Title [SENIOR ENVIRONMENTAL ANALYST]

Address [PO BOX 5888] Street

[BURLINGTON] City

[MA] State [01803] Zip

Telephone Number .....[617]-[229]-[3359]

1.13 This reporting year is from ..... [01] Mo. [88] Year to [12] Mo. [88] Year

[ ] Mark (X) this box if you attach a continuation sheet.

1.14 Facility Acquired -- If you purchased this facility during the reporting year, provide the following information about the seller:

NA

CBI Name of Seller [_]

[_] Mailing Address [_]
Street

[_]
City

[_][_] [_][_][_][_][_]--[_][_][_]
State Zip

Employer ID Number .....[_][_][_][_][_][_][_]

Date of Sale .....[_][_] [_][_] [_]
Mo. Day Ye

Contact Person [_]

Telephone Number .....[_][_][_]-[_][_][_]-[_][_][_]

1.15 Facility Sold -- If you sold this facility during the reporting year, provide the following information about the buyer:

NA

CBI Name of Buyer [_]

[_] Mailing Address [_]
Street

[_]
City

[_][_] [_][_][_][_][_]--[_][_][_]
State Zip

Employer ID Number .....[_][_][_][_][_][_][_]

Date of Purchase .....[_][_] [_][_] [_]
Mo. Day Ye

Contact Person [_]

Telephone Number .....[_][_][_]-[_][_][_]-[_][_][_]

[_] Mark (X) this box if you attach a continuation sheet.

1.16 For each classification listed below, state the quantity of the listed substance that was manufactured, imported, or processed at your facility during the reporting year.

CBI	Classification	Quantity (kg or specify)
[ ]	Manufactured	NA
	Imported	NA
	Processed (include quantity repackaged)	7.72
	Of that quantity manufactured or imported, report that quantity:	
	In storage at the beginning of the reporting year	NA
	For on-site use or processing	NA
	For direct commercial distribution (including export)	NA
	In storage at the end of the reporting year	NA
	Of that quantity processed, report that quantity:	
	In storage at the beginning of the reporting year	.51
	Processed as a reactant (chemical producer)	0
	Processed as a formulation component (mixture producer)	0
	Processed as an article component (article producer)	7.72
	Repackaged (including export)	0
	In storage at the end of the reporting year	.51

[ ] Mark (X) this box if you attach a continuation sheet.

PART C IDENTIFICATION OF MIXTURES

1.17 Mixture -- If the listed substance on which you are required to report is a mixture or a component of a mixture, provide the following information for each component chemical. (If the mixture composition is variable, report an average percentage of each component chemical for all formulations.)

CBI

[ ]

Component Name	Supplier Name	Average % Composition by Weight (specify precision, e.g., 45% ± 0.5%)
2,4 Toluene Diisocyanate	Morton Thiokol, Inc.	6.3% (± UK %)
UK	Morton Thiokol, Inc.	93.7% (± UK %)
	Total	100%

[ ] Mark (X) this box if you attach a continuation sheet.

2.04 State the quantity of the listed substance that your facility manufactured, imported or processed during the 3 corporate fiscal years preceding the reporting year in descending order.

CBI

[ ] Year ending ..... [1][2] Mo. [8][7] Year

Quantity manufactured ..... NA kg

Quantity imported ..... NA kg

Quantity processed ..... 5.66 kg

Year ending ..... [1][2] Mo. [8][6] Year

Quantity manufactured ..... NA kg

Quantity imported ..... NA kg

Quantity processed ..... 6.69 kg

Year ending ..... [1][2] Mo. [8][5] Year

Quantity manufactured ..... NA kg

Quantity imported ..... NA kg

Quantity processed ..... 10.8 kg

2.05 Specify the manner in which you manufactured the listed substance. Circle all appropriate process types.

CBI

[ ] (NA)

Continuous process 1

Semicontinuous process 2

Batch process 3

[ ] Mark (X) this box if you attach a continuation sheet.

2.06 CBI Specify the manner in which you processed the listed substance. Circle all appropriate process types.

[ ] (NA)

Continuous process .....

Semicontinuous process .....

Batch process .....

2.07 CBI State your facility's name-plate capacity for manufacturing or processing the listed substance. (If you are a batch manufacturer or batch processor, do not answer this question.)

[ ]

Manufacturing capacity ..... NA kg/yr

Processing capacity ..... NA kg/yr

2.08 CBI If you intend to increase or decrease the quantity of the listed substance manufactured, imported, or processed at any time after your current corporate fiscal year, estimate the increase or decrease based upon the reporting year's production volume.

[ ]

	Manufacturing Quantity (kg)	Importing Quantity (kg)	Processing Quantity (kg)
Amount of increase	NA	NA	0
Amount of decrease	NA	NA	7.72

[ ] Mark (X) this box if you attach a continuation sheet.

2.09 For the three largest volume manufacturing or processing process types involving the listed substance, specify the number of days you manufactured or processed the listed substance during the reporting year. Also specify the average number of hours per day each process type was operated. (If only one or two operations are involved, list those.)

CBI

[ ]

	Days/Year	Average Hours Da
Process Type #1 (The process type involving the largest quantity of the listed substance.)		
Manufactured	NA	
Processed	252	6
Process Type #2 (The process type involving the 2nd largest quantity of the listed substance.)		
Manufactured	NA	
Processed	NA	
Process Type #3 (The process type involving the 3rd largest quantity of the listed substance.)		
Manufactured	NA	
Processed	NA	

2.10 State the maximum daily inventory and average monthly inventory of the listed substance that was stored on-site during the reporting year in the form of a bulk chemical.

CBI

[ ]

Maximum daily inventory ..... _____ k

Average monthly inventory ..... _____ k

[ ] Mark (X) this box if you attach a continuation sheet.

2.11 Related Product Types -- List any byproducts, coproducts, or impurities present with the listed substance in concentrations greater than 0.1 percent as it is manufactured, imported, or processed. The source of byproducts, coproducts, or impurities means the source from which the byproducts, coproducts, or impurities are made or introduced into the product (e.g., carryover from raw material, reaction product, etc.).

CBI

[ ]

CAS No.	Chemical Name	Byproduct, Coproduct or Impurity[1]	Concentration (%) (specify ± % precision)	Source of Byproducts, Coproducts, or Impurities
584-84-9	2,4 Toluene Diisocyanate	I	UK	Raw Material

[1]Use the following codes to designate byproduct, coproduct, or impurity:

B = Byproduct
C = Coproduct
I = Impurity

[ ] Mark (X) this box if you attach a continuation sheet.

2.12 Existing Product Types -- List all existing product types which you manufactured, imported, or processed using the listed substance during the reporting year. List the quantity of listed substance you use for each product type as a percentage of t total volume of listed substance used during the reporting year. Also list the CBI quantity of listed substance used captively on-site as a percentage of the value [ ] listed under column b., and the types of end-users for each product type. (Refer t the instructions for further explanation and an example.)

a. Product Types[1]	b. % of Quantity Manufactured, Imported, or Processed	c. % of Quantity Used Captively On-Site	d. Type of End-Users
K	UK	UK	H

[1]Use the following codes to designate product types:

A = Solvent
B = Synthetic reactant
C = Catalyst/Initiator/Accelerator/ Sensitizer
D = Inhibitor/Stabilizer/Scavenger/ Antioxidant
E = Analytical reagent
F = Chelator/Coagulant/Sequestrant
G = Cleanser/Detergent/Degreaser
H = Lubricant/Friction modifier/Antiwear agent
I = Surfactant/Emulsifier
J = Flame retardant
K = Coating/Binder/Adhesive and additives
L = Moldable/Castable/Rubber and additive
M = Plasticizer
N = Dye/Pigment/Colorant/Ink and additive
O = Photographic/Reprographic chemical and additives
P = Electrodeposition/Plating chemicals
Q = Fuel and fuel additives
R = Explosive chemicals and additives
S = Fragrance/Flavor chemicals
T = Pollution control chemicals
U = Functional fluids and additives
V = Metal alloy and additives
W = Rheological modifier
X = Other (specify) _____

[2]Use the following codes to designate the type of end-users:

I = Industrial
CM = Commercial
CS = Consumer
H = Other (specify) U.S. Defense Dept.

[ ] Mark (X) this box if you attach a continuation sheet.

2.13 Expected Product Types -- Identify all product types which you expect to manufacture, import, or process using the listed substance at any time after your current corporate fiscal year. For each use, specify the quantity you expect to manufacture, import, or process for each use as a percentage of the total volume of listed substance used during the reporting year. Also list the quantity of listed substance used captively on-site as a percentage of the value listed under column b., and the types of end-users for each product type. (Refer to the instructions for further explanation and an example.)

CBI
[ ]

a. Product Types[1]	b. % of Quantity Manufactured, Imported, or Processed	c. % of Quantity Used Captively On-Site	d. Type of End-Users
K	100%	100%	H

[1]Use the following codes to designate product types:

A = Solvent
B = Synthetic reactant
C = Catalyst/Initiator/Accelerator/Sensitizer
D = Inhibitor/Stabilizer/Scavenger/Antioxidant
E = Analytical reagent
F = Chelator/Coagulant/Sequestrant
G = Cleanser/Detergent/Degreaser
H = Lubricant/Friction modifier/Antiwear agent
I = Surfactant/Emulsifier
J = Flame retardant
K = Coating/Binder/Adhesive and additives
L = Moldable/Castable/Rubber and additive
M = Plasticizer
N = Dye/Pigment/Colorant/Ink and additive
O = Photographic/Reprographic chemical and additives
P = Electrodeposition/Plating chemicals
Q = Fuel and fuel additives
R = Explosive chemicals and additives
S = Fragrance/Flavor chemicals
T = Pollution control chemicals
U = Functional fluids and additives
V = Metal alloy and additives
W = Rheological modifier
X = Other (specify) _____

[2]Use the following codes to designate the type of end-users:

I = Industrial
CM = Commercial
CS = Consumer
H = Other (specify) U.S. Defense Dept.

[ ] Mark (X) this box if you attach a continuation sheet.

2.14 CBI [ ] Final Product -- Complete the following table for each type of final product manufactured, imported, or processed at your facility that contains the listed substance other than as an impurity.

(NA)

a. Product Type[1]	b. Final Product's Physical Form[2]	c. Average % Composition of Listed Substance in Final Product	d. Type of End-Users[3]

[1]Use the following codes to designate product types:

A = Solvent
B = Synthetic reactant
C = Catalyst/Initiator/Accelerator/Sensitizer
D = Inhibitor/Stabilizer/Scavenger/Antioxidant
E = Analytical reagent
F = Chelator/Coagulant/Sequestrant
G = Cleanser/Detergent/Degreaser
H = Lubricant/Friction modifier/Antiwear agent
I = Surfactant/Emulsifier
J = Flame retardant
K = Coating/Binder/Adhesive and additives
L = Moldable/Castable/Rubber and additive
M = Plasticizer
N = Dye/Pigment/Colorant/Ink and additive
O = Photographic/Reprographic chemical and additives
P = Electrodeposition/Plating chemicals
Q = Fuel and fuel additives
R = Explosive chemicals and additives
S = Fragrance/Flavor chemicals
T = Pollution control chemicals
U = Functional fluids and additives
V = Metal alloy and additives
W = Rheological modifier
X = Other (specify) _____

[2]Use the following codes to designate the final product's physical form:

A = Gas
B = Liquid
C = Aqueous solution
D = Paste
E = Slurry
F1 = Powder
F2 = Crystalline solid
F3 = Granules
F4 = Other solid
G = Gel
H = Other (specify) _____

[3]Use the following codes to designate the type of end-users:

I = Industrial
CM = Commercial
CS = Consumer
H = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

2.15 CBI Circle all applicable modes of transportation used to deliver bulk shipments of the listed substance to off-site customers. (NA)

[ ] Truck .....

Railcar .....

Barge, Vessel .....

Pipeline .....

Plane .....

Other (specify) _____ .....

2.16 CBI Customer Use -- Estimate the quantity of the listed substance used by your customers or prepared by your customers during the reporting year for use under each category of end use listed (i-iv).

[ ] (NA)

Category of End Use

i. Industrial Products

Chemical or mixture ..... _____ kg/y

Article ..... _____ kg/y

ii. Commercial Products

Chemical or mixture ..... _____ kg/y

Article ..... _____ kg/y

iii. Consumer Products

Chemical or mixture ..... _____ kg/y

Article ..... _____ kg/y

iv. Other

Distribution (excluding export) ..... _____ kg/y

Export ..... _____ kg/y

Quantity of substance consumed as reactant ..... _____ kg/y

Unknown customer uses ..... _____ kg/y

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 3 PROCESSOR RAW MATERIAL IDENTIFICATION

PART A GENERAL DATA

3.01 Specify the quantity purchased and the average price paid for the listed substance for each major source of supply listed. Product trades are treated as purchases.
CBI The average price is the market value of the product that was traded for the listed substance.
[ ]

Source of Supply	Quantity (kg)	Average Price ($/kg)
The listed substance was manufactured on-site.		
The listed substance was transferred from a different company site.		
The listed substance was purchased directly from a manufacturer or importer.	122.47	$29.45/kg
The listed substance was purchased from a distributor or repackager.		
The listed substance was purchased from a mixture producer.		

3.02 Circle all applicable modes of transportation used to deliver the listed substance to your facility.
CBI
[ ]

(Truck) ..... (1)

Railcar .....

Barge, Vessel .....

Pipeline .....

Plane .....

Other (specify) _____ .....

[ ] Mark (X) this box if you attach a continuation sheet.

3.03 a. Circle all applicable containers used to transport the listed substance to your facility.

[ ]

Bags 1

(Boxes) 2

Free standing tank cylinders 3

Tank rail cars 4

Hopper cars 5

Tank trucks 6

Hopper trucks 7

Drums 8

Pipeline 9

(Other) (specify) 9-lb gallon cans 10

b. If the listed substance is transported in pressurized tank cylinders, tank rail cars, or tank trucks, state the pressure of the tanks. (NA)

Tank cylinders ..... _____ mmHg

Tank rail cars ..... _____ mmHg

Tank trucks ..... _____ mmHg

[ ] Mark (X) this box if you attach a continuation sheet.

PART B RAW MATERIAL IN THE FORM OF A MIXTURE

3.04 If you obtain the listed substance in the form of a mixture, list the trade name(s) of the mixture, the name of its supplier(s) or manufacturer(s), an estimate of the CBI average percent composition by weight of the listed substance in the mixture, and t amount of mixture processed during the reporting year.

[ ]

Trade Name	Supplier or Manufacturer	Average % Composition by Weight (specify ± % precision)	Amount Processed (kg/yr)
Solithane 113	Morton Thiokol, Inc.	6.3% (± UK%)	122.47

[ ] Mark (X) this box if you attach a continuation sheet.

PART C RAW MATERIAL VOLUME

3.05 CBI [ ] State the quantity of the listed substance used as a raw material during the reporting year in the form of a class I chemical, class II chemical, or polymer, and the percent composition, by weight, of the listed substance.

	Quantity Used (kg/yr)	% Composition by Weight of Listed Substance in Raw Material (specify ± % precision)
Class I chemical	122.47	6.3% (± UK%)
Class II chemical		
Polymer		

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 4 PHYSICAL/CHEMICAL PROPERTIES

General Instructions:

If you are reporting on a mixture as defined in the glossary, reply to questions in Section 4 that are inappropriate to mixtures by stating "NA -- mixture."

For questions 4.06-4.15, if you possess any hazard warning statement, label, MSDS, or other notice that addresses the information requested, you may submit a copy or reasonable facsimile in lieu of answering those questions which it addresses.

PART A PHYSICAL/CHEMICAL DATA SUMMARY

4.01 Specify the percent purity for the three major[1] technical grade(s) of the listed substance as it is manufactured, imported, or processed. Measure the purity of the substance in the final product form for manufacturing activities, at the time you import the substance, or at the point you begin to process the substance.

CBI
[ ]

	Manufacture	Import	Process
Technical grade #1	_____ % purity	_____ % purity	61.3 % purity
Technical grade #2	_____ % purity	_____ % purity	_____ % purity
Technical grade #3	_____ % purity	_____ % purity	_____ % purity

[1] Major = Greatest quantity of listed substance manufactured, imported or processed.

4.02 Submit your most recently updated Material Safety Data Sheet (MSDS) for the listed substance, and for every formulation containing the listed substance. If you possess an MSDS that you developed and an MSDS developed by a different source, submit your version. Indicate whether at least one MSDS has been submitted by circling the appropriate response.

(Yes) ..... (1)

No 2

Indicate whether the MSDS was developed by your company or by a different source.

(Your company) ..... (1)

(Another source) ..... (2)

[ ] Mark (X) this box if you attach a continuation sheet.

MORTON THIOKOL, INC.
Morton Chemical Division

Material Safety Data Sheet

Product Identification

Product Name: S-113
Chemical Name: Isocyanate Terminated Polyol
Common Name: S-113 Resin
CAS Number: None
Product Use: Coatings and Castings
Emergency Phone: 815-338-1800
Other Phone: 601-475-2121

Hazardous Ingredients

Chemical Name	Common Name	CAS No.	%	OSHA PEL	ACGIH TLV
Toluene Diisocyanate	TDI	584-84-9	6.3		0.005PPM

Physical Data

Boiling Point (760 mm Hg) 250°C
Specific Gravity (Water = 1): 1.073
Vapor Pressure (mm Hg) Not applicable
% Non-volatile: 93
Vapor Density (AIR=1) >6
Evaporation Rate (Ether = 1) <1
Solubility in Water Not applicable
pH Not applicable
Appearance: Pale Yellow
Odor Irritating Pungent Odor

Fire and Explosion Hazard Data

Flash Point 200°F
Flammable Limits **Lel** N/A **Uel** N/A
Method Used:
Open Cup
Extinguishing Media:
Foam, dry chemical
Special Fire Fighting Procedures:
Fire fighters should wear NIOSH-MSHA approved self-contained breathing apparatus.
Unusual Fire and Explosion Hazards:
None as far as known.
Hazardous Decomposition Products:
CO, CO_2, NO_2, possibly aromatic amines, aldehydes, and ammonia.

• Registered trademark

Health Hazard Data

Oral Toxicity:	Oral-Rat LD_{50}: 5800 mg/Kg[1]
Dermal Toxicity:	Not established for product. May cause irritating dermatitis and possible sensitization given prolonged or repeated skin contact.
Eye Irritation/Corrosivity:	Not established for product. Ocular irritant.
Inhalation Toxicity:	Not established for product. Inhalation-human TCL: 0.02 ppm/2y
Chronic Toxicity:	Not established for product.

Effects of Overexposure:

Ingestion:	Not established for product. Possible nausea, vomiting, gastrointestinal pain.
Skin Contact:	Not established for product. May cause irritation, dermatitis and possible skin sensitization given prolonged or repeated skin contact.
Eye Contact:	Not established for product. Possible irritation, tearing, reddening and blurred vision.
Inhalation:	Not established for product. Possible respiratory tract, mucous membrane irritation, sensitization. Symptoms may be delayed and could include dry cough, chest tightness, wheezing, shortness of breath, asthmatic-type symptoms.
Acute Systemic:	Not established for product.
Chronic Systemic:	Not established for product. Extended exposure to isocyanate vapors may cause sensitization resulting in impaired pulmonary function.

Notes:

- Toxicity testing on the product mixture has not been conducted. Comments listed in **Health Hazard Data** pertain to the isocyanate listed in **Hazardous Ingredients.**
- Persons with pre-existing skin disorders may be more susceptable to isocyanate.
- In persons with impaired pulmonary function, especially those with obstructive airway diseases, the breathing of isocyanate vapors may cause exacerbation of symptoms due to irritant properties of the isocyanate.

[1] NIOSH RTECS, 1981-82 Edition

Emergency and First Aid Procedures

Ingestion:	Large amounts of warm water should be taken immediately to reduce the concentration of the chemical. Vomiting should be induced. Additional water should be taken after vomiting occurs. Treatment by a physician should follow immediately.
Skin Contact:	Remove contamination immediately by washing with large amounts of water. If the exposure is major, the safety shower should be used immediately. Remove all contaminated clothing. The polymer should be wiped off the body with a cloth, and the contaminated area washed with soap and water for at least five minutes.
Eye Contact:	Flush with large amounts of water for 10 to 15 minutes lifting the upper and lower eyelids frequently. Get medical attention immediately.
Inhalation:	A person showing symptons of isocyanate irritation should be removed promptly from the contaminated area. If exposure has been severe, artificial respiration should be applied. Get medical attention immediately.
Note to Physician:	Supportive therapy is recommended. No known antidote.

Reactivity Data

Stability ☒ Stable ☐ Unstable Under ordinary storage conditions.

Conditions to Avoid: Storage at temperatures above 110°F and moisture contact.

Incompatibility: (Materials to Avoid) Oxidizing substances.

Can Hazardous Polymerization Occur: No

Hazardous Conditions to Avoid: Storage at temperatures above 300°F.

Hazardous Decomposition Products and Conditions: CO, CO_2, NO_2, possibly aromatic amines, aldehydes, and ammonia, if heated to pyrolysis.

Spill or Leak Procedures

Response to Small Spills: Stop discharge and contain spill. It should be cleaned up promptly with solution of 5% aqueous ammonia and 10% isopropyl alcohol. Oil absorbent materials may be sprinkled on spills to assist in cleaning up. Contaminated absorbent should be promptly swept up and removed to a ventilated location or dumped into water or aqueous 5% ammonia. After removal of material, floor should be scrubbed with water in a ammonia solution.

Response to Large Spills: Stop discharge and contain spill using dike, barrier or other means. Recover with vacuum truck, sorbents or other means. Place contaminated material in suitable containers for further handling.

Hazards to Be Avoided: Do not flush into stream, other bodies of water or storm sewer. Avoid contact with skin or clothing. Other hazards see Fire and Explosion Hazard Data and Health Hazard Data.

Reportable Quantity: None established.

Waste Classification: May be subject to special conditions for disposal on the operation.

Disposal Methods: 1) Recycle, if feasible; 2) incinerate at authorized facilities; and 3) landfill (solidification may be required) in authorized facilities in accordance with federal, state and local regulations.

Control Measures

Respiratory Protection:

Should wear NIOSH/MSHA approved self contained breathing apparatus as necessary within equipment limitations. Comply with OSHA 1910.134(CFR, Respiratory Protection. Contaminant levels will vary dependent on the operation. Industrial hygiene consultation is recommended to assist in respirator selection, use and training.

For Hands, Body:

Chemical resistant gloves recommended for hand protection, work clothing for general body protection.

For Eyes:

Wear safety glasses, chemical goggles, face shield (eight inch minimum) if chemical goggles not available.

Other:

Prolonged contact should be avoided.

Ventilation:

Provide adequate ventilation to minimize inhalation.

Special Precautions

Recommended Storage Practice and Conditions:

Store between 50 and 100°F. Storage at higher temperatures causes polymerization.

Other Precautions:

Eye wash and shower should be available. Use under well ventilated conditions. For personal hygiene protection, personnel should wash thoroughly after handling product.

Labeling Information

Dot Shipping Name: Not regulated by DOT. **DOT Identification Number:** Not Applicable.
DOT Label: Not Applicable.
Contents of Precautionary Label:

Warning! Harmful if inhaled or swallowed. Contains Monomeric Isocyanate. May cause allergic skin or respiratory reaction. May cause eye irritation. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Use with adequate ventilation. Use with adequate protective clothing. Keep container closed. Contact with water or humid air generates pressure. Normal operating temperatures are between room temperature and 300°F (150°C). Heating far in excess of 300°F may cause decompcsition and emission of toxic fumes. Do not take internally. For industrial use only.

First Aid: If eye contact occurs, flush with water for at least 15 minutes. If contracted with skin, use a waterless handcleaner to remove, followed by washing with soap and water. Wash contaminated clothing before reuse. Discard contaminated shoes. If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Call a physician.

In Case of Fire: Use water spray or smother with foam, dry chemical, or CO_2.

In Case of Spill: Cover with absorbent clay or sawdust and remove.

Warning: This container hazardous when empty. Since empty containers retain product residues (vapor, liquid or solids) all labeled hazardous precautions must be observed. Do not reuse Empty Container for food, clothing or products for human or animal consumption or skin contact without professional cleaning.

Users Responsibility

A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions, in addition to those described herein, are required. Any health hazard and safety information contained herein should be passed on to your customers or employees, as the case may be. Morton Thiokol, Inc. must rely on the user to utilize the information we have supplied to develop work practice guidelines and employee instructional programs for the individual operation and regulations.

Disclaimer of Liability

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. Users of any chemical should satisfy themselves that the conditions and methods of use assure that the chemical is used safely. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO THE INFORMATION CONTAINED HEREIN OR THE CHEMICAL TO WHICH THE INFORMATION REFERS. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

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April 1986 FORM #C-159

MORTON THIOKOL, INC.
Morton Chemical Division
333 W. Wacker Drive, Chicago, Illinois 60606-1292 (312) 807-2000

As Supplied

Material Safety Data Sheet

GENERAL ELECTRIC

AUTOMATED SYSTEMS DEPARTMENT
GENERAL ELECTRIC COMPANY • P.O. BOX 356 • BURLINGTON, MASSACHUSETTS 01803 • (617) 229-5000

Date Prepared:
Supersedes (date):

Section 1 - Identify

Common Name (used on label): 1890105-1 PART A

Chemical Name:

Trade Name(s) or Synonym(s): Blue Thixotropic Staking Compound

Formula: Proprietary

CAS No.:

D.O.T.: Shipping Name | Hazard Class | I.D. No.

Section 2 - Hazardous Ingredients

Hazardous Component(s):	CAS No.:	%	Threshold Limit Value
Toluene Diisocyanate (TDI)	584-84-9	6.3	0.005 PPM
Silicon Dioxide (Amorphous)	7631-86-9	99+	20 MPPCF

Other Component(s):

Section 3 - Physical Characteristics

Appearance and Odor: Pale Yellow, irritating pungent odor

Boiling Point	Melting Point	Freezing Point	Specific Gravity (H_2O = 1)
250 °C			
Percent Volatile by Volume (%)	**Vapor Density (Air = 1)**	**Evaporation Rate (____ = 1)**	**Vapor Pressure (mm Hg)**
Solubility in Water	**Reactivity in Water**	**pH**	

Section 4 - Fire & Explosion Data

Flash Point: 200 °F

Flammable Limits in Air % by Volume: Lower N/A Upper N/A

Auto-Ignition Temperature:

Extinguisher Media: ☒ Foam ☐ Alcohol Foam ☐ CO_2 ☒ Dry Chemical ☐ Water Fog ☐ Other

Special Fire Fighting Procedures: Fire fighters should wear NIOSH-MSHA approved self-contained breathing appara

Unusual Fire and Explosion Hazards: None, as far as known.

Section 5 - Reactivity Data

Stability: Unstable ☐ Conditions to Avoid / Stable ☒ Storage above 110 °F and moisture contact

Incompatability (Materials to Avoid) Water ☐ Other: Oxidizing Substances

Hazardous Decomposition Products: CO, CO_2, NO_2, possible aromatic amines, aldehydes and ammonia

Hazardous Polymerization: May Occur ☐ Conditions to Avoid / Will Not Occur ☒

Section 6 - Health Hazards

OSHA Permissible Exposure Limit (P.E.L.) | ACGIH Threshold Limit Value (TLV:STEL) | Other Exposure Limit Used

Principal Routes of Exposure:
Ocular irritant, inhalation, ingestion, skin contact

Signs and Symptoms of Overexposure: 1. Acute Overexposure
Symptoms of overexposure are asthma-like. Eye contact can cause irritation and possible burns leading to permanent damage. Skin contact can cause redness, swelling and blistering with possible sensitization. Ingestion has a corrosive action on digestive trac

2. Chronic Overexposure

Medical Conditions Generally Recognized as Being Aggravated by Exposure:
Asthma, other respiratory disorders.

Section 7 - Emergency and First Aid Procedures

1. **Inhalation** Remove victim to fresh air. Artificial respiration or oxygen should be used. Get medical help
2. **Eyes** Flush eyes with water for 15 min. Medical help immediately after.
3. **Skin** Wash skin with soap and water, remove contaminated clothing, get medical help.
4. **Ingestion** Large amounts of water, induce vomiting. Treatment by a physician should follow immediately.

Section 8 - Toxicity Data

Acute oral LD50 = 32.0 ml/kg.

Section 9 - Special Protection Information

Ventilation Local exhaust ventilation required for mixing and use.

Respiratory Protection (Specify Type) Air supplied respirator may be required if ventilation is not adequate to meet TL

Protective Gloves Rubber

Eye Protection Goggles

Other Protection Clothing or Equipment Long-sleeved protective clothing.

Section 10 - Special Precautions and Spill/Leak Procedures

Precautions to Be Taken in Handling and Storage Keep containers tightly closed. Use only in area with adequate exhaust ventilation. Store in cool, dry area away from oxidizing agents.

Other Precautions Emergency eye wash and safety shower should be available in work area.

Steps to Be Taken in Case Material is Released or Spilled Clean promptly using solution of 5% aqueous ammonia and 10% ispropanol Oil absorbent material may be used to assist in cleanup. After cleanup, scrub floor with ammonia solution.

Waste Disposal Methods Dispose of unreacted material as hazardous waste.

Prepared By:

4.03 Submit a copy or reasonable facsimile of any hazard information (other than an MSDS) that is provided to your customers/users regarding the listed substance or any formulation containing the listed substance. Indicate whether this information has been submitted by circling the appropriate response.

(Yes) .....

No .....

4.04 For each activity that uses the listed substance, circle all the applicable numbers corresponding to each physical state of the listed substance during the activity listed. Physical states for importing and processing activities are determined at the time you import or begin to process the listed substance. Physical states for manufacturing, storage, disposal and transport activities are determined using the final state of the product.

CBI

[ ]

	Physical State				
Activity	Solid	Slurry	Liquid	Liquified Gas	Gas
Manufacture	1	2	3	4	5
Import	1	2	3	4	5
Process	1	2	(3)	4	5
Store	1	(2)	3	4	5
Dispose	(1)	2	3	4	5
Transport	1	2	3	4	5

[ ] **Mark (X) this box if you attach a continuation sheet.**

4.05 Particle Size -- If the listed substance exists in particulate form during any of t following activities, indicate for each applicable physical state the size and the percentage distribution of the listed substance by activity. Do not include particles ≥10 microns in diameter. Measure the physical state and particle sizes f importing and processing activities at the time you import or begin to process the CBI listed substance. Measure the physical state and particle sizes for manufacturing [ ] storage, disposal and transport activities using the final state of the product.

NA

Physical State		Manufacture	Import	Process	Store	Dispose	Transpo
Dust	<1 micron						
	1 to <5 microns						
	5 to <10 microns						
Powder	<1 micron						
	1 to <5 microns						
	5 to <10 microns						
Fiber	<1 micron						
	1 to <5 microns						
	5 to <10 microns						
Aerosol	<1 micron						
	1 to <5 microns						
	5 to <10 microns						

[ ] **Mark (X) this box if you attach a continuation sheet.**

SECTION 5 ENVIRONMENTAL FATE

PART A RATE CONSTANTS AND TRANSFORMATION PRODUCTS

5.01 Indicate the rate constants for the following transformation processes.

a. Photolysis:

Absorption spectrum coefficient (peak) .... UK (1/M cm) at _____ nm

Reaction quantum yield, ϕ ..... UK at _____ nm

Direct photolysis rate constant, k_p, at ... UK 1/hr _____ latitu

b. Oxidation constants at 25°C:

For $^1O_2$ (singlet oxygen), k_{ox} ..... UK 1/M

For RO_2 (peroxy radical), k_{ox} ..... UK 1/M

c. Five-day biochemical oxygen demand, BOD_5 ... UK mg/l

d. Biotransformation rate constant:

For bacterial transformation in water, k_b... UK 1/hr

Specify culture ..... UK

e. Hydrolysis rate constants:

For base-promoted process, k_B ..... UK 1/M

For acid-promoted process, k_A ..... UK 1/M

For neutral process, k_N ..... UK 1/hr

f. Chemical reduction rate (specify conditions) UK

g. Other (such as spontaneous degradation) ... UK

[ ] Mark (X) this box if you attach a continuation sheet.

PART B PARTITION COEFFICIENTS

5.02 a. Specify the half-life of the listed substance in the following media.

Media	Half-life (specify units)
Groundwater	UK
Atmosphere	UK
Surface water	UK
Soil	UK

b. Identify the listed substance's known transformation products that have a half-life greater than 24 hours.

CAS No.	Name	Half-life (specify units)	Media
UK			in
			in
			in
			in

5.03 Specify the octanol-water partition coefficient, K_{ow} ... UK at 25°C

Method of calculation or determination .....

5.04 Specify the soil-water partition coefficient, K_d ..... UK at 25°C

Soil type .....

5.05 Specify the organic carbon-water partition coefficient, K_{oc} ..... UK at 25°C

5.06 Specify the Henry's Law Constant, H ..... UK atm-m^3/mole

[ ] Mark (X) this box if you attach a continuation sheet.

5.07 List the bioconcentration factor (BCF) of the listed substance, the species for whi it was determined, and the type of test used in deriving the BCF.

Bioconcentration Factor	Species	Test[1]
UK		

[1] Use the following codes to designate the type of test:

F = Flowthrough
S = Static

[ ] Mark (X) this box if you attach a continuation sheet.

6.04 CBI [ ] For each market listed below, state the quantity sold and the total sales value of the listed substance sold or transferred in bulk during the reporting year.

Market	Quantity Sold or Transferred (kg/yr)	Total Sales Value ($/yr)
Retail sales		
Distribution -- Wholesalers		
Distribution -- Retailers		
Intra-company transfer		
Repackagers		
Mixture producers		
Article producers		
Other chemical manufacturers or processors		
Exporters		
Other (specify)		

6.05 CBI [ ] Substitutes -- List all known commercially feasible substitutes that you know exist for the listed substance and state the cost of each substitute. A commercially feasible substitute is one which is economically and technologically feasible to use in your current operation, and which results in a final product with comparable performance in its end uses.

Substitute	Cost ($/kg)
Polyamine Curing Agent Compound (Part A)	UK
Polyurethane Polymer Compound (Part B)	UK

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 7 MANUFACTURING AND PROCESSING INFORMATION

General Instructions:

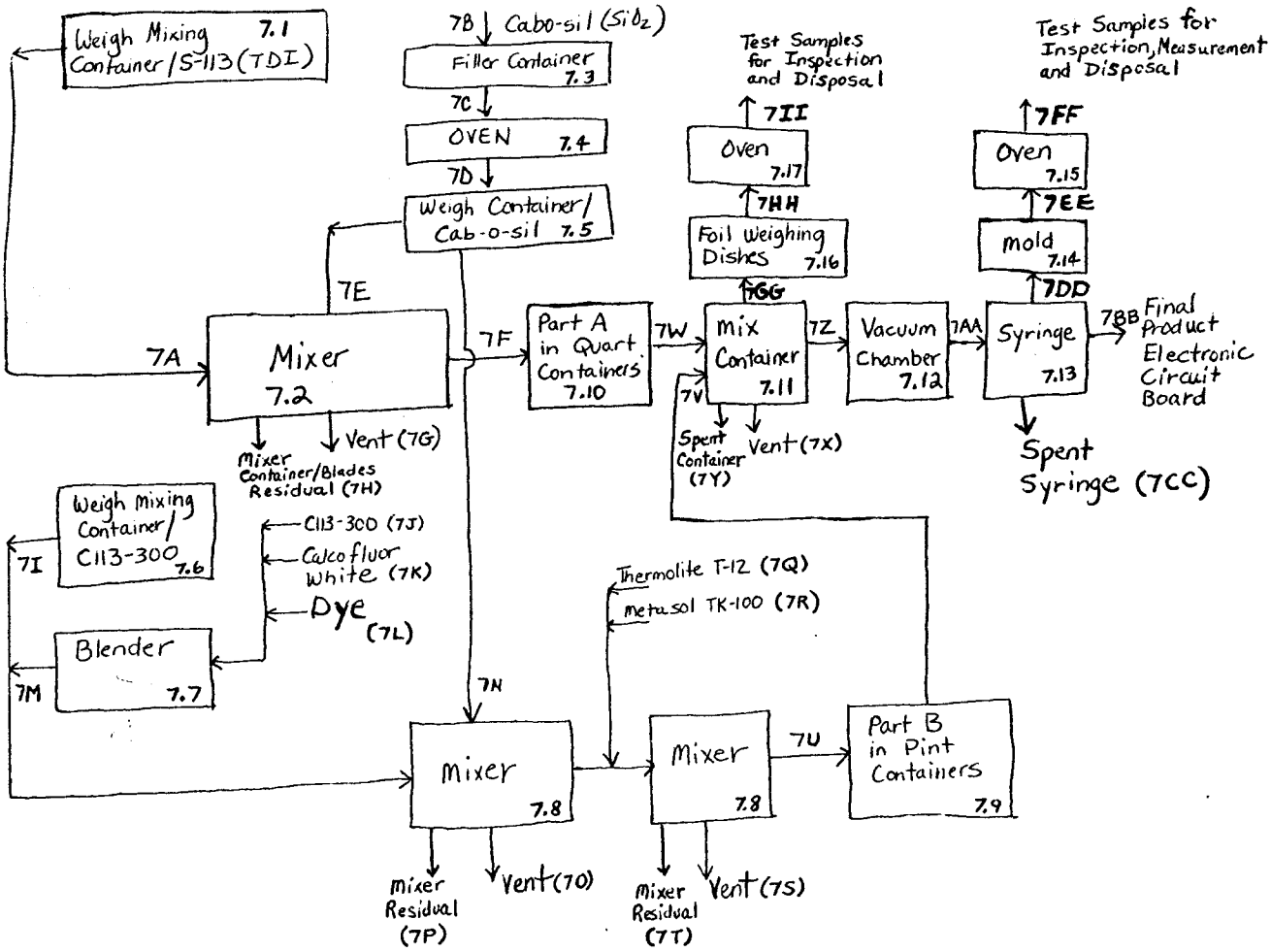
For questions 7.04-7.06, provide a separate response for each process block flow diagram provided in questions 7.01, 7.02, and 7.03. Identify the process type from which the information is extracted.

PART A MANUFACTURING AND PROCESSING PROCESS TYPE DESCRIPTION

7.01 In accordance with the instructions, provide a process block flow diagram showing the major (greatest volume) process type involving the listed substance.

CBI

[ ] Process type ..... Adhesive Formulation

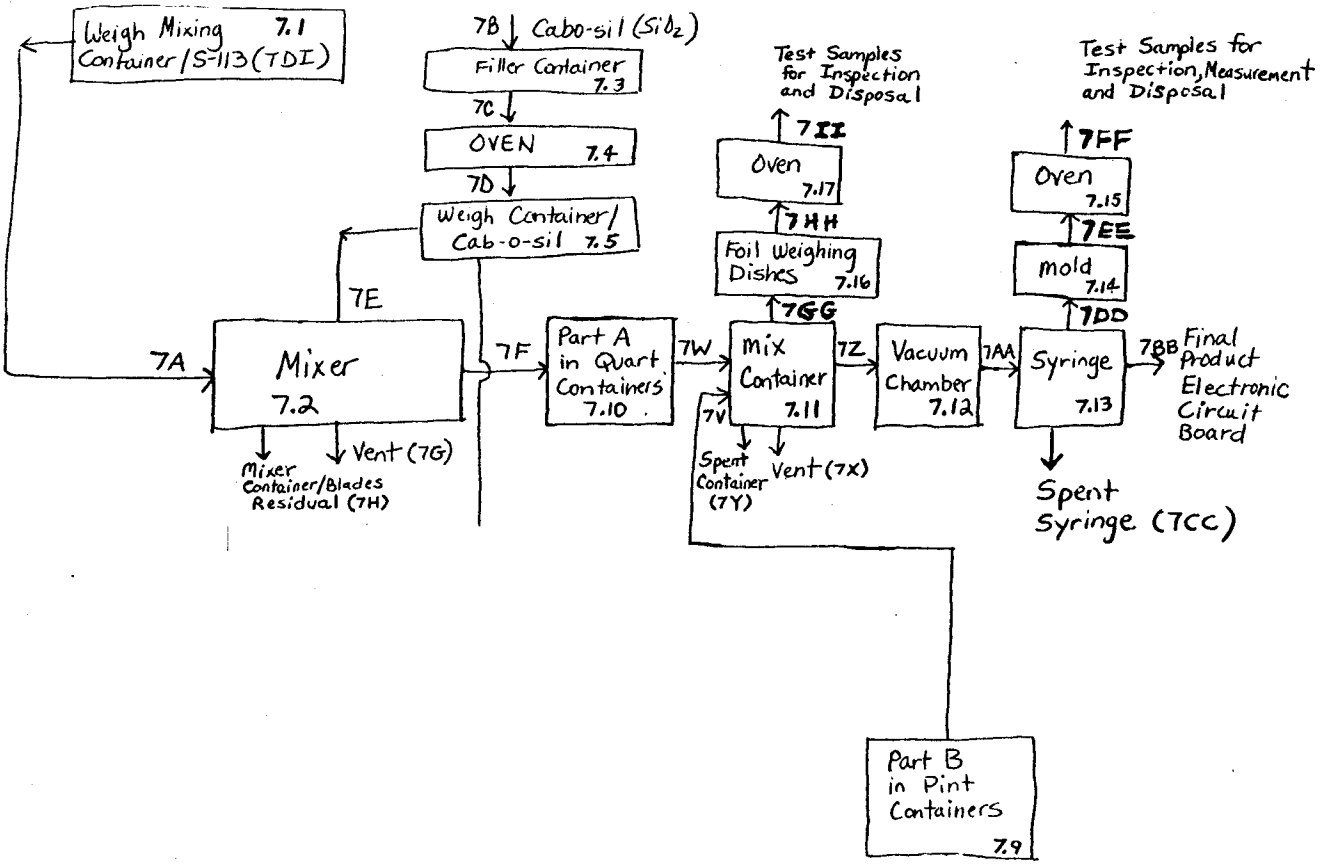


[ ] **Mark (X) this box if you attach a continuation sheet.**

7.03 In accordance with the instructions, provide a process block flow diagram showing a process emission streams and emission points that contain the listed substance and which, if combined, would total at least 90 percent of all facility emissions if not treated before emission into the environment. If all such emissions are released from one process type, provide a process block flow diagram using the instructions for question 7.01. If all such emissions are released from more than one process type, provide a process block flow diagram showing each process type as a separate block.

CBI

[ ] Process type ..... Adhesive Formulation



[ ] **Mark (X) this box if you attach a continuation sheet.**

7.04 Describe the typical equipment types for each unit operation identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Adhesive Formulation

Unit Operation ID Number	Typical Equipment Type	Operating Temperature Range (°C)	Operating Pressure Range (mm Hg)	Vessel Composition
7.1	Mixer Can	Ambient	Atmospheric	Stainless Steel
	Balance	Ambient	Atmospheric	Iron/Steel
7.2	Mixer Can	Ambient	Atmospheric	Stainless Steel
	Mixer	Ambient	Atmospheric	Stainless Steel
	Hood	Ambient	Atmospheric	Galvanized Steel
7.3	Filler Container	Ambient	Atmospheric	Galvanized Tin
7.4	Oven	125°C	Atmospheric	Galvanized Metal
7.5	Balance	Ambient	Atmospheric	Iron/Steel
7.6	Mixer Can	Ambient	Atmospheric	Stainless Steel
	Balance	Ambient	Atmospheric	Iron/Steel

[X] Mark (X) this box if you attach a continuation sheet.

7.04 Describe the typical equipment types for each unit operation identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Adhesive Formulation

Unit Operation ID Number	Typical Equipment Type	Operating Temperature Range (°C)	Operating Pressure Range (mm Hg)	Vessel Composition
7.7	Blender	Ambient	Atmospheric	Stainless Steel/Plastic
7.8	Mixer Can	Ambient	Atmospheric	Stainless Steel
	Mixer	Ambient	Atmospheric	Stainless Steel
	Hood	Ambient	Atmospheric	Galvanized Steel
7.9	Pint Container	Ambient	Atmospheric	Tin
7.10	Quart Container	Ambient	Atmospheric	Tin
7.11	Pint/Quart Container	Ambient	Atmospheric	Polyethylene
	Tongue Depressor	Ambient	Atmospheric	Wood
7.12	Vacuum Chamber	Ambient	0-.5	Steel/Glass
7.13	Syringes	Ambient	Atmospheric	Plastic

[X] **Mark (X) this box if you attach a continuation sheet.**

7.04 Describe the typical equipment types for each unit operation identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Adhesive Formulation

Unit Operation ID Number	Typical Equipment Type	Operating Temperature Range (°C)	Operating Pressure Range (mm Hg)	Vessel Composition
7.14	Molds	Ambient	Atmospheric	Aluminum
7.15	Oven	62.5°C	Atmospheric	Galvanized metal
7.16	Weighing Dishes	Ambient	Atmospheric	Aluminum
7.17	Oven	62.5°C	Atmospheric	Galvanized metal

[ ] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Adhesive Formulation

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7A	Solithane 113	OL	81.0
7B	Cab-o-sil	SO	4.72
7C	Cab-o-sil	SO	4.72
7D	Cab-o-sil	SO	4.72
7E	Cab-o-sil	SO	4.72
7F	Part A	OL	85.72
7G	Part A Vapors	GU	UK
7H	Part A Residuals	OL	UK

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Adhesive Formulation

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7I	Catalyst 113-300	OL	63.297
7J	Catalyst 113-300	OL	2.808
7K	Calcofluor White	SO	.1755
7L	Dye	OL	.351
7M	Mixture of 7J, 7K, 7L	OL	.5985
7N	Cab-o-sil	SO	8.623
7O	Mixer Vapors	GU	UK
7P	Mixer Residual	OL	UK

[1] Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Adhesive Formulation

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7Q	Thermolite T-12	OL	.06318
7R	Metasol TK-100	SO	.14625
7S	Mixer Vapors	GU	UK
7T	Mixer Residual	OL	UK
7U	Part B	OL	75.464
7V	Part B	OL	75.464
7W	Part A	OL	85.72
7X	Mix Vapors	GU	UK

[1] Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Adhesive Formulation

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7Y	Spent Container	SO	UK
7Z	Thixotropic Staking Compound	OL	126.692
7AA	Thixotropic Staking Compound	OL	126.692
7BB	Thixotropic Staking Compound	OL	126.692
7CC	Spent Syringe	SO	UK
7DD	Thixotropic Staking Compound	OL	2.40
7EE	Thixotropic Staking Compound	OL	2.40
7FF	Thixotropic Staking Compound	SO	2.40

[1] Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Adhesive Formulation

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7GG	Thixotropic Staking Compound	OL	5.64
7HH	Thixotropic Staking Compound	OL	5.64
7II	Thixotropic Staking Compound	SO	5.64

[1] Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[ ] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocop this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type ..... Adhesive Formulation

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7A	2,4-Toluene Diisocyanate	6.3 % (A)(W)	UK	UK
7B	Silicon Dioxide	99+ % (A)(W)	UK	UK
7C	Silicon Dioxide	99+ % (A)(W)	UK	UK
7D	Silicon Dioxide	99+ % (A)(W)	UK	UK
7E	Silicon Dioxide	99+ % (A)(W)	UK	UK
7F	2,4-Toluene Diisocyanate	5.95 % (E)(W)	UK	UK
	Silicon Dioxide	5.51 % (E)(W)	UK	UK
7G	2,4-Toluene Diisocyanate	UK	UK	UK
7H	2,4-Toluene Diisocyanate	5.95 % (E)(W)	UK	UK
	Silicon Dioxide	5.51 % (E)(W)	UK	UK
7I	Ricinus Oil	UK	UK	UK
7J	Ricinus Oil	UK	UK	UK

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type ..... Adhesive Formulation

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7K	UK	UK	UK	UK
7L	Epichlorohydrin (ECH)	Trace	UK	UK
7M	Ricinus Oil	UK	UK	UK
	Epichlorohydrin	Trace	UK	UK
7N	Silicon Dioxide	99+% (A)(W)	UK	UK
7O	UK	UK	UK	UK
7P	Ricinus Oil	UK	UK	UK
	Epichlorohydrin	Trace	UK	UK
7Q	Dibutyltin Dilaurate	>95% (A)(W)	UK	UK
7R	2-(4-thiazolyl)benzimidazole	98.5% (A)(W)	UK	UK
7S	UK	UK	UK	UK
7T	Ricinus Oil	UK	UK	UK
	Epichlorohydrin	Trace	UK	UK
	Dibutyltin Dilaurate	.08% (E)(W)	UK	UK
	2-(4-thiazolyl)benzimidazole	.19% (E)(W)	UK	UK

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type ..... Adhesive Formulation

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7U, 7V	Ricinus Oil	UK	UK	UK
	Dibutyltin Dilaurate	.08% (E)(W)	UK	UK
	Epichlorohydrin	Trace	UK	UK
	2-(4-thiazoly)benzimidazole	.19% (E)(W)	UK	UK
7W	2,4-Toluene Diisocyanate	5.95% (E)(W)	UK	UK
	Silicon Dioxide	5.51% (E)(W)	UK	UK
7X	2,4-Toluene Diisocyanate	UK	UK	UK
7Y, 7Z, 7AA, 7BB, 7CC, 7DD, 7EE, 7FF, 7GG, 7HH, 7II	2,4-Toluene Diisocyanate	3.71% (E)(W)	UK	UK
	Silicon Dioxide	7.74% (E)(W)	UK	UK
	Dibutyltin Dilaurate	0.039% (E)(W)	UK	UK
	2-(4-thiazoly)benzimidazole	0.079% (E)(W)	UK	UK
	Ricinus Oil	UK	UK	UK
	Epichlorohydrin	Trace	UK	UK

7.06 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

7.06 (continued)

[1]For each additive package introduced into a process stream, specify the compounds that are present in each additive package, and the concentration of each component. Assign an additive package number to each additive package and list this number in column b. (Refer to the instructions for further explanation and an example. Refer to the glossary for the definition of additive package.)

NA

Additive Package Number	Components of Additive Package	Concentrations (% or ppm)
1		
2		
3		
4		
5		

[2]Use the following codes to designate how the concentration was determined:

A = Analytical result
E = Engineering judgement/calculation

[3]Use the following codes to designate how the concentration was measured:

V = Volume
W = Weight

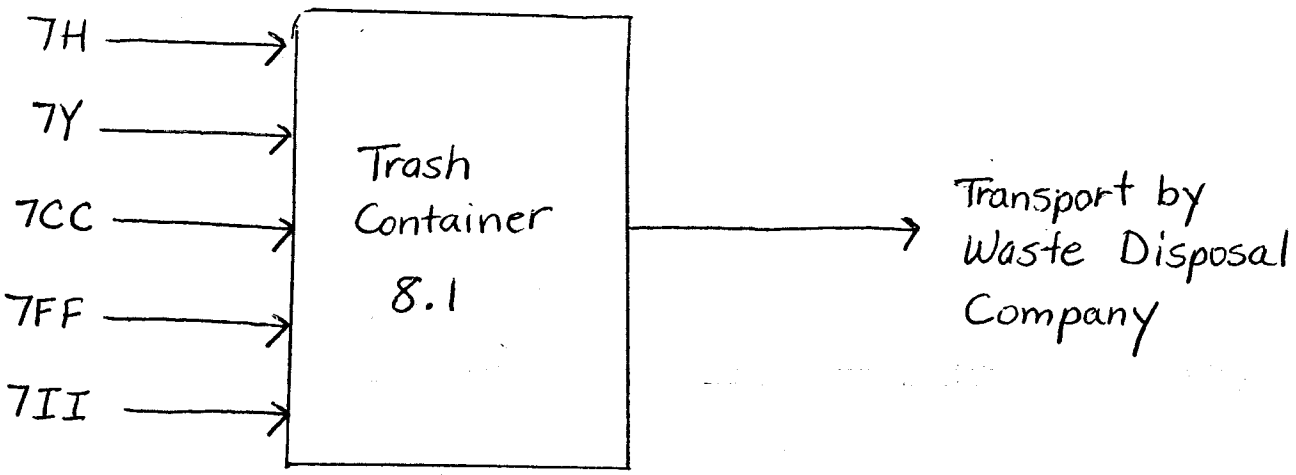
[ ] Mark (X) this box if you attach a continuation sheet.

PART A RESIDUAL TREATMENT PROCESS DESCRIPTION

8.01 In accordance with the instructions, provide a residual treatment block flow diagra- which describes the treatment process used for residuals identified in question 7.01

CBI

[ ] Process type ..... Adhesive Formulation



[ ] Mark (X) this box if you attach a continuation sheet.

PART B RESIDUAL GENERATION AND CHARACTERIZATION

8.05 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Adhesive Formulation

a. Stream ID Code	b. Type of Hazardous Waste[1]	c. Physical State of Residual[2]	d. Known Compounds[3]	e. Concentrations (% or ppm)[4,5,6]	f. Other Expected Compounds	g. Estimated Concentrations (% or ppm)
7H	I, H A08, B86	OL	2,4-TDI	5.96% (E)(W)	UK	UK
			SiO_2	5.51% (E)(W)	UK	UK
7Y	I, H A08, B86	OL	2,4-TDI	3.71% (E)(W)	UK	UK
			SiO_2	7.74% (E)(W)	UK	UK
			Dibutyltin Dilaurate	0.03% (E)(W)	UK	UK
			2-(4-thiazoly) benzimidazole	0.07% (E)(W)	UK	UK
			Ricinus Oil	UK	UK	UK
			Epichlorohydrin	Trace	UK	UK
7CC, 7FF, 7II	I, H A08, B86	SO	2,4-TDI	3.71% (E)(W)	UK	UK
			SiO_2	7.74% (E)(W)	UK	UK
			Dibutyltin Dilaurate	0.03% (E)(W)	UK	UK
			2-(4-thiazoly) benzimidazole	0.07% (E)(W)	UK	UK
			Ricinus Oil	UK	UK	UK
			Epichlorohydrin	Trace	UK	UK

8.05 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

8.05 (continued)

[1]Use the following codes to designate the type of hazardous waste:

I = Ignitable
C = Corrosive
R = Reactive
E = EP toxic
T = Toxic
H = Acutely hazardous

[2]Use the following codes to designate the physical state of the residual:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

8.05 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

8.05 (continued)

[3]For each additive package introduced into a process stream, specify the compounds that are present in each additive package, and the concentration of each component. Assign an additive package number to each additive package and list this number in column d. (Refer to the instructions for further explanation and an example. Refer to the glossary for the definition of additive package.)

NA

UK

Additive Package Number	Components of Additive Package	Concentrations (% or ppm)
1		
2		
3		
4		
5		

[4]Use the following codes to designate how the concentration was determined:

A = Analytical result
E = Engineering judgement/calculation

8.05 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

8.05 (continued)

[5]Use the following codes to designate how the concentration was measured:

V = Volume
W = Weight

[6]Specify the analytical test methods used and their detection limits in the table below. Assign a code to each test method used and list those codes in column e.

NA

Code	Method	Detection Lim (± ug/l)
1	UK	
2		
3		
4		
5		
6		

[ ] Mark (X) this box if you attach a continuation sheet.

8.06 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Adhesive Formulation

a. Stream ID Code	b. Waste Description Code[1]	c. Management Method Code[2]	d. Residual Quantities (kg/yr)	e. Management of Residual (%) On-Site	e. Management of Residual (%) Off-Site	f. Costs for Off-Site Management (per kg)	g. Changes in Management Methods
7H	B67	1D	UK		100%	UK	III (7/90)
7Y	B67, B85	1D	UK		100%	UK	III (7/90)
7CC	B82, B85	1D	UK		100%	UK	III (7/90)
7FF	B82	1D	2.40		100%	UK	III (7/90)
7II	B82	1D	5.64		100%	UK	III (7/90)

[1] Use the codes provided in Exhibit 8-1 to designate the waste descriptions

[2] Use the codes provided in Exhibit 8-2 to designate the management methods

[ ] Mark (X) this box if you attach a continuation sheet.

8.22 Describe the combustion chamber design parameters for each of the three largest (by capacity) incinerators that are used on-site to burn the residuals identified in your process block or residual treatment block flow diagram(s).

CBI

[ ]

Incinerator	Combustion Chamber Temperature (°C)		Location of Temperature Monitor		Residence Time In Combustion Chamber (seconds)	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
1						
2						
3						

Indicate if Office of Solid Waste survey has been submitted in lieu of response by circling the appropriate response.

Yes 1

No 2

8.23 Complete the following table for the three largest (by capacity) incinerators that are used on-site to burn the residuals identified in your process block or residual treatment block flow diagram(s).

CBI

[ ]

NA

Incinerator	Air Pollution Control Device[1]	Types of Emissions Data Available
1		
2		
3		

Indicate if Office of Solid Waste survey has been submitted in lieu of response by circling the appropriate response.

Yes 1

No 2

[1]Use the following codes to designate the air pollution control device:

S = Scrubber (include type of scrubber in parenthesis)
E = Electrostatic precipitator
O = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

PART A EMPLOYMENT AND POTENTIAL EXPOSURE PROFILE

9.01 Mark (X) the appropriate column to indicate whether your company maintains records o the following data elements for hourly and salaried workers. Specify for each data element the year in which you began maintaining records and the number of years the CBI records for that data element are maintained. (Refer to the instructions for furthe explanation and an example.)

[ ]

Data Element	Data are Maintained for: Hourly Workers	Salaried Workers	Year in Which Data Collection Began	Number of Years Records Are Maintaine
Date of hire	X	X	1958	7
Age at hire	X	X	1958	7
Work history of individual before employment at your facility	X	X	1958	7
Sex	X	X	1958	7
Race	X	X	1958	7
Job titles	X	X	1958	7
Start date for each job title	X	X	1958	7
End date for each job title	X	X	1958	7
Work area industrial hygiene monitoring data	X	X	UK	Permanently
Personal employee monitoring data	X	X	UK	Permanently
Employee medical history		X	UK	Permanently
Employee smoking history			NA	NA
Accident history		X	UK	30 years
Retirement date	X	X	1958	7
Termination date	X	X	1958	7
Vital status of retirees			NA	NA
Cause of death data		X	UK	30 years

[ ] Mark (X) this box if you attach a continuation sheet.

9.02 In accordance with the instructions, complete the following table for each activity in which you engage.

CBI

[ ]

a. Activity	b. Process Category	c. Yearly Quantity (kg)	d. Total Workers	e. Total Worker-Hours
Manufacture of the listed substance	Enclosed	NA		
	Controlled Release	NA		
	Open	NA		
On-site use as reactant	Enclosed	NA		
	Controlled Release	NA		
	Open	NA		
On-site use as nonreactant	Enclosed	NA		
	Controlled Release	NA		
	Open	NA		
On-site preparation of products	Enclosed	NA		
	Controlled Release	7.72	10	1517
	Open	NA		

[ ] Mark (X) this box if you attach a continuation sheet.

9.03 Provide a descriptive job title for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance.

CBI

[ ]

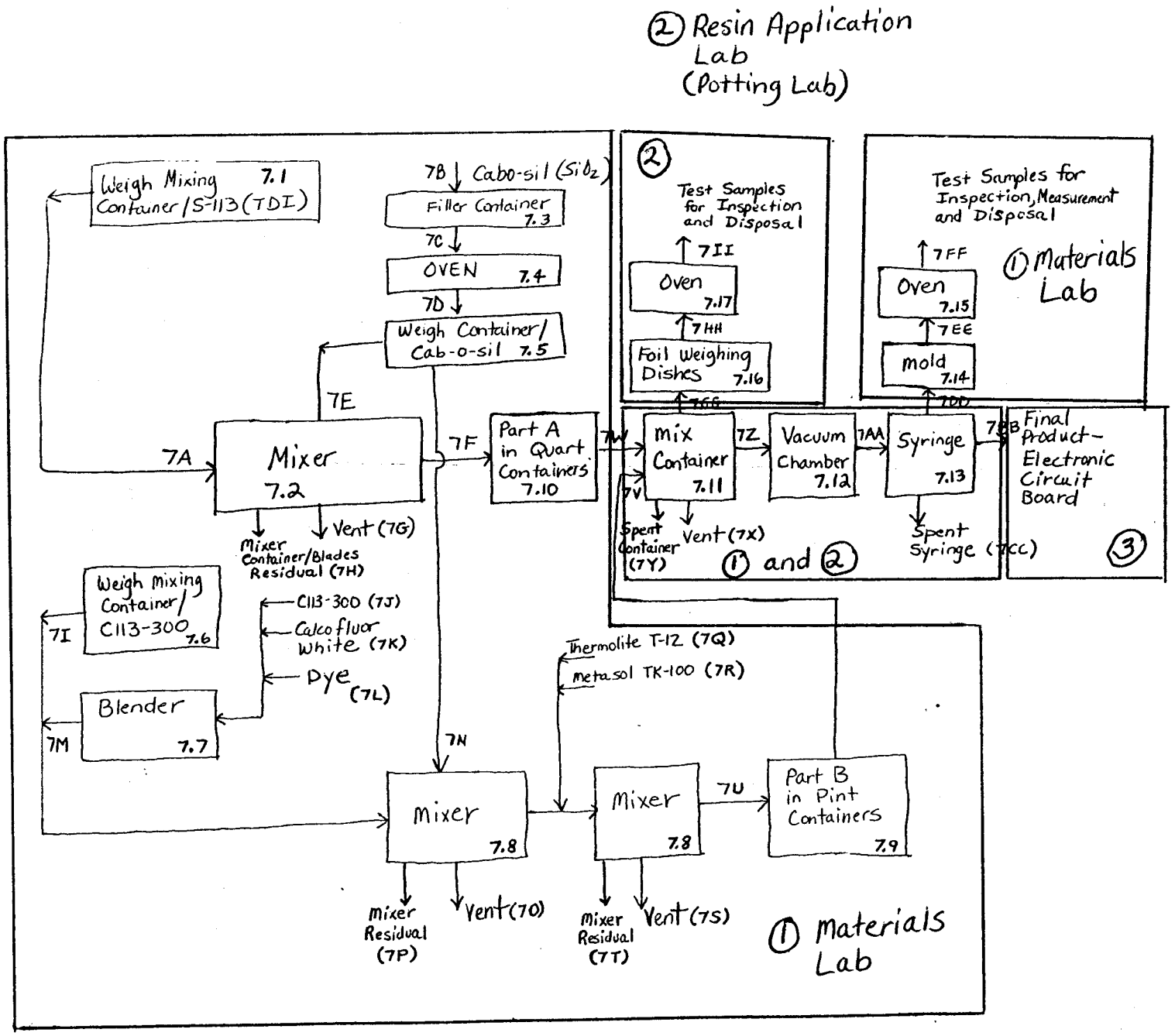
Labor Category	Descriptive Job Title
A	Member, Production Engineering Staff
B	Senior Precision Assembler
C	Assembly Technician
D	
E	
F	
G	
H	
I	
J	

[ ] Mark (X) this box if you attach a continuation sheet.

9.04 In accordance with the instructions, provide your process block flow diagram(s) and indicate associated work areas.

CBI

[ ] Process type ..... Adhesive Formulation



[ ] Mark (X) this box if you attach a continuation sheet.

9.05 Describe the various work area(s) shown in question 9.04 that encompass workers who may potentially come in contact with or be exposed to the listed substance. Add any additional areas not shown in the process block flow diagram in question 7.01 or 7.02. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Adhesive Formulation

Work Area ID	Description of Work Areas and Worker Activities
1	Materials Lab (Formulate, Mix, Cure, Test)
2	Resin Application Lab (Mix, Quick-Cure, Inspect)
3	Assembly Area (Application to Circuit Boards)
4	
5	
6	
7	
8	
9	
10	

[ ] Mark (X) this box if you attach a continuation sheet.

9.06 Complete the following table for each work area identified in question 9.05, and for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Adhesive Formulation

Work area 1

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number of Days per Year Exposed
A	1	Inhalation, Direct Skin contact	OL	D	39

[1]Use the following codes to designate the physical state of the listed substance at the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

[ ] Mark (X) this box if you attach a continuation sheet.

9.06 Complete the following table for each work area identified in question 9.05, and f each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this questi

CBI and complete it separately for each process type and work area.

[ ] Process type ..... Adhesive Formulation

Work area 2

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number c Days per Year Exposed
B	1	Inhalation, Direct Skin Contact	OL	C	235

[1]Use the following codes to designate the physical state of the listed substance at the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

[ ] Mark (X) this box if you attach a continuation sheet.

9.06 Complete the following table for each work area identified in question 9.05, and f each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this quest: CBI and complete it separately for each process type and work area.

[ ] Process type ..... Adhesive Formulation

Work area 3

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number Days pe Year Expose
C	8	inhalation	OL	B	252

[1]Use the following codes to designate the physical state of the listed substance a the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

[ ] Mark (X) this box if you attach a continuation sheet.

9.07 For each labor category represented in question 9.06, indicate the 8-hour Time Weighted Average (TWA) exposure levels and the 15-minute peak exposure levels. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Adhesive Formulation

Work area 1

Labor Category	8-hour TWA Exposure Level (ppm, mg/m^3, other-specify)	15-Minute Peak Exposure Level (ppm, mg/m^3, other-specify)
A	< .0044 ppm	UK

[ ] Mark (X) this box if you attach a continuation sheet.

9.07 For each labor category represented in question 9.06, indicate the 8-hour Time Weighted Average (TWA) exposure levels and the 15-minute peak exposure levels. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Adhesive Formulation

Work area 2

Labor Category	8-hour TWA Exposure Level (ppm, mg/m^3, other-specify)	15-Minute Peak Exposure Level (ppm, mg/m^3, other-specify)
B	< .0044 ppm	UK

[ ] Mark (X) this box if you attach a continuation sheet.

9.07 For each labor category represented in question 9.06, indicate the 8-hour Time Weighted Average (TWA) exposure levels and the 15-minute peak exposure levels. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Adhesive Formulation

Work area 3

Labor Category	8-hour TWA Exposure Level (ppm, mg/m^3, other-specify)	15-Minute Peak Exposure Level (ppm, mg/m^3, other-specify)
C	< .0044 ppm	UK

[ ] Mark (X) this box if you attach a continuation sheet.

PART B WORK PLACE MONITORING PROGRAM

9.08 If you monitor worker exposure to the listed substance, complete the following table.

CBI

[ ]

Sample/Test	Work Area ID	Testing Frequency (per year)	Number of Samples (per test)	Who Samples[1]	Analyzed In-House (Y/N)	Number of Years Records Maintained
Personal breathing zone	1,2,3	0	0	NA	NA	Permanently
General work area (air)						
Wipe samples						
Adhesive patches						
Blood samples						
Urine samples						
Respiratory samples						
Allergy tests						
Other (specify)						
Other (specify)						
Other (specify)						

[1]Use the following codes to designate who takes the monitoring samples:

A = Plant industrial hygienist
B = Insurance carrier
C = OSHA consultant
D = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

9.09 For each sample type identified in question 9.08, describe the type of sampling and analytical methodology used for each type of sample.

CBI

[ ]

Sample Type	Sampling and Analytical Methodology
NA	

9.10 If you conduct personal and/or ambient air monitoring for the listed substance, specify the following information for each equipment type used.

CBI

[ ]

Equipment Type[1]	Detection Limit[2]	Manufacturer	Averaging Time (hr)	Model Number
NA				

[1]Use the following codes to designate personal air monitoring equipment types:

A = Passive dosimeter
B = Detector tube
C = Charcoal filtration tube with pump
D = Other (specify) _____

Use the following codes to designate ambient air monitoring equipment types:

E = Stationary monitors located within work area
F = Stationary monitors located within facility
G = Stationary monitors located at plant boundary
H = Mobile monitoring equipment (specify) _____
I = Other (specify) _____

[2]Use the following codes to designate detection limit units:

A = ppm
B = Fibers/cubic centimeter (f/cc)
C = Micrograms/cubic meter (μ/m^3)

[ ] Mark (X) this box if you attach a continuation sheet.

9.11 If you conduct routine medical tests for monitoring the health effects of exposure to the listed substance, specify the type and frequency of the tests.

CBI

[ ]	Test Description	Frequency (weekly, monthly, yearly, etc.)
	Complete Physical Exam with CEA testing	Yearly

[ ] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Adhesive Formulation

Work area 1

Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust	Y	UK	N	NA
General dilution				
Other (specify)				
Vessel emission controls				
Mechanical loading or packaging equipment				
Other (specify)				

[ ] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposu to the listed substance. Photocopy this question and complete it separately for ea process type and work area.

CBI

[ ] Process type ..... Adhesive Formulation

Work area 2

Engineering Control	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust	Y	UK	N	NA
General dilution				
Other (specify)				
Vessel emission controls				
Mechanical loading or packaging equipment				
Other (specify)				

[ ] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposu to the listed substance. Photocopy this question and complete it separately for ea process type and work area.

CBI

[ ] Process type ..... Adhesive Formulation

Work area 3

Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust				
General dilution				
Other (specify) General Ventilation	Y	UK	Y	UK
Vessel emission controls				
Mechanical loading or packaging equipment				
Other (specify)				

[ ] Mark (X) this box if you attach a continuation sheet.

9.13 Describe all equipment or process modifications you have made within the 3 years prior to the reporting year that have resulted in a reduction of worker exposure to the listed substance. For each equipment or process modification described, state the percentage reduction in exposure that resulted. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Adhesive Formulation

Work area 1

Equipment or Process Modification	Reduction in Worker Exposure Per Year (%)
None	

[ ] Mark (X) this box if you attach a continuation sheet.

9.13 Describe all equipment or process modifications you have made within the 3 years prior to the reporting year that have resulted in a reduction of worker exposure to the listed substance. For each equipment or process modification described, state the percentage reduction in exposure that resulted. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Adhesive Formulation

Work area 2

Equipment or Process Modification	Reduction in Worker Exposure Per Year (%)
None	

[ ] Mark (X) this box if you attach a continuation sheet.

9.13 Describe all equipment or process modifications you have made within the 3 years prior to the reporting year that have resulted in a reduction of worker exposure to the listed substance. For each equipment or process modification described, state the percentage reduction in exposure that resulted. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Adhesive Formulation

Work area 3

Equipment or Process Modification	Reduction in Worker Exposure Per Year (%)
None	

[ ] Mark (X) this box if you attach a continuation sheet.

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Adhesive Formulation

Work area 1

Equipment Types	Wear or Use (Y/N)
Respirators	Y
Safety goggles/glasses	Y
Face shields	N
Coveralls	N
Bib aprons	N
Chemical-resistant gloves	Y
Other (specify)	
smock	Y

[ ] Mark (X) this box if you attach a continuation sheet.

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Adhesive Formulation

Work area 2

Equipment Types	Wear or Use (Y/N)
Respirators	N
Safety goggles/glasses	Y
Face shields	N
Coveralls	N
Bib aprons	N
Chemical-resistant gloves	Y
Other (specify)	
smock	Y

[ ] Mark (X) this box if you attach a continuation sheet.

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Adhesive Formulation

Work area 3

Equipment Types	Wear or Use (Y/N)
Respirators	N
Safety goggles/glasses	N
Face shields	N
Coveralls	N
Bib aprons	N
Chemical-resistant gloves	N
Other (specify)	
_____	N
_____	

[ ] Mark (X) this box if you attach a continuation sheet.

9.15 If workers use respirators when working with the listed substance, specify for each process type, the work areas where the respirators are used, the type of respirators used, the average usage, whether or not the respirators were fit tested, and the type and frequency of the fit tests. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Adhesive Formulation

Work Area	Respirator Type	Average Usage[1]	Fit Tested (Y/N)	Type of Fit Test[2]	Frequency of Fit Tests (per year)
1	Permissible Chemical Cartridge Respirator for Organic Vapors (NIOSH/MSHA approved)	A	Y	QL	A

[1]Use the following codes to designate average usage:

A = Daily
B = Weekly
C = Monthly
D = Once a year
E = Other (specify) _____

[2]Use the following codes to designate the type of fit test:

QL = Qualitative
T = Quantitative

[ ] Mark (X) this box if you attach a continuation sheet.

PART E WORK PRACTICES

9.19 Describe all of the work practices and administrative controls used to reduce or eliminate worker exposure to the listed substance (e.g., restrict entrance only to authorized workers, mark areas with warning signs, insure worker detection and monitoring practices, provide worker training programs, etc.). Photocopy this CBI question and complete it separately for each process type and work area.

[ ]

Process type ..... Adhesive Formulation

Work area 1

1. Mechanical Ventilation
2. Respirator Protection
3. Eye Protection Required
4. HAZCOM Training

9.20 Indicate (X) how often you perform each housekeeping task used to clean up routine leaks or spills of the listed substance. Photocopy this question and complete it separately for each process type and work area.

Process type ..... Adhesive Formulation

Work area 1

Housekeeping Tasks	Less Than Once Per Day	1-2 Times Per Day	3-4 Times Per Day	More Than 4 Times Per Day
Sweeping				
Vacuuming				
Water flushing of floors				
Other (specify)				
Wash with Methyl Ethyl Ketone (MEK) and Kimwipes	X			

[ ] Mark (X) this box if you attach a continuation sheet.

PART E WORK PRACTICES

9.19 Describe all of the work practices and administrative controls used to reduce or eliminate worker exposure to the listed substance (e.g., restrict entrance only to authorized workers, mark areas with warning signs, insure worker detection and monitoring practices, provide worker training programs, etc.). Photocopy this CBI question and complete it separately for each process type and work area.

[ ]

Process type ..... Adhesive Formulation

Work area 2

1. Mechanical Ventilation
2. Eye Protection Required
3. HAZCOM Training

9.20 Indicate (X) how often you perform each housekeeping task used to clean up routine leaks or spills of the listed substance. Photocopy this question and complete it separately for each process type and work area.

Process type ..... Adhesive Formulation

Work area 2

Housekeeping Tasks	Less Than Once Per Day	1-2 Times Per Day	3-4 Times Per Day	More Than 4 Times Per Day
Sweeping				
Vacuuming				
Water flushing of floors				
Other (specify)				
Wash with Methyl Ethyl Ketone (MEK) and Kimwipes	X			

[ ] Mark (X) this box if you attach a continuation sheet.

PART E WORK PRACTICES

9.19 Describe all of the work practices and administrative controls used to reduce or eliminate worker exposure to the listed substance (e.g., restrict entrance only to authorized workers, mark areas with warning signs, insure worker detection and monitoring practices, provide worker training programs, etc.). Photocopy this question and complete it separately for each process type and work area.

CBI

[ ]

Process type ..... Adhesive Formulation

Work area 3

1. HAZCOM Training

9.20 Indicate (X) how often you perform each housekeeping task used to clean up routine leaks or spills of the listed substance. Photocopy this question and complete it separately for each process type and work area.

Process type ..... Adhesive Formulation

Work area 3

(NA)

Housekeeping Tasks	Less Than Once Per Day	1-2 Times Per Day	3-4 Times Per Day	More Than 4 Times Per Day
Sweeping				
Vacuuming				
Water flushing of floors				
Other (specify)				

[ ] Mark (X) this box if you attach a continuation sheet.

9.21 Do you have a written medical action plan for responding to routine or emergency exposure to the listed substance?

Routine exposure

Yes .....

No .....

Emergency exposure

Yes .....

No .....

If yes, where are copies of the plan maintained?

Routine exposure: _____

Emergency exposure: _____

9.22 Do you have a written leak and spill cleanup plan that addresses the listed substance? Circle the appropriate response.

(Yes) .....

No .....

If yes, where are copies of the plan maintained? Safety Office, Emergency Coordinator's Office

Has this plan been coordinated with state or local government response organizations? Circle the appropriate response

(Yes) .....

No .....

9.23 **Who is responsible for monitoring worker safety at your facility? Circle the appropriate response.**

Plant safety specialist .....

Insurance carrier .....

OSHA consultant .....

Other (specify) _____ .....

[ ] **Mark (X) this box if you attach a continuation sheet.**

SECTION 10 ENVIRONMENTAL RELEASE

General Instructions:

Complete Part E (questions 10.23-10.35) for each non-routine release involving the listed substance that occurred during the reporting year. Report on all releases that are equal to or greater than the listed substance's reportable quantity value, RQ, unless the release is federally permitted as defined in 42 U.S.C. 9601, or is specifically excluded under the definition of release as defined in 40 CFR 302.3(22). Reportable quantities are codified in 40 CFR Part 302. If the listed substance is not a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and thus, does not have an RQ, then report releases that exceed 2,270 kg. If such a substance however, is designated as a CERCLA hazardous substance, then report those releases that are equal to or greater than the RQ. The facility may have answered these questions or similar questions under the Agency's Accidental Release Information Program and may already have this information readily available. Assign a number to each release and use this number throughout this part to identify the release. Releases over more than a 24-hour period are not single releases, i.e., the release of a chemical substance equal to or greater than an RQ must be reported as a separate release for each 24-hour period the release exceeds the RQ.

For questions 10.25-10.35, answer the questions for each release identified in question 10.23. Photocopy these questions and complete them separately for each release.

PART A GENERAL INFORMATION

10.01 Where is your facility located? Circle all appropriate responses.

CBI

[ ] Industrial area 1

Urban area 2

Residential area 3

Agricultural area 4

Rural area 5

Adjacent to a park or a recreational area 6

Within 1 mile of a navigable waterway 7

Within 1 mile of a school, university, hospital, or nursing home facility 8

Within 1 mile of a non-navigable waterway 9

Other (specify) _____ 10

[ ] Mark (X) this box if you attach a continuation sheet.

10.02 Specify the exact location of your facility (from central point where process unit is located) in terms of latitude and longitude or Universal Transverse Mercader (UTM) coordinates.

Latitude ..... 67 ° 21 ' 00

Longitude ..... 54 ° 57 ' 45

UTM coordinates ..... Zone UK, Northing UK, Easting UK

10.03 If you monitor meteorological conditions in the vicinity of your facility, provide the following information.

Average annual precipitation ..... _____ inches/yea

Predominant wind direction ..... _____

10.04 Indicate the depth to groundwater below your facility.

Depth to groundwater ..... _____ meters

10.05 For each on-site activity listed, indicate (Y/N/NA) all routine releases of the listed substance to the environment. (Refer to the instructions for a definition o: Y, N, and NA.)

CBI

[ ]

On-Site Activity	Environmental Release		
	Air	Water	Land
Manufacturing	NA		
Importing	NA		
Processing	Y	N	N
Otherwise used	NA		
Product or residual storage	N	N	N
Disposal	NA		
Transport	NA		

[ ] Mark (X) this box if you attach a continuation sheet.

10.06 Provide the following information for the listed substance and specify the level of precision for each item. (Refer to the instructions for further explanation and an example.)

CBI

[ ]

Quantity discharged to the air	UK	kg/yr ± ___
Quantity discharged in wastewaters	NA	kg/yr ± ___
Quantity managed as other waste in on-site treatment, storage, or disposal units	NA	kg/yr ± ___
Quantity managed as other waste in off-site treatment, storage, or disposal units	NA	kg/yr ± ___

[ ] Mark (X) this box if you attach a continuation sheet.

10.07 Complete the following table for each process stream containing the listed substance as identified in your process block or residual treatment block flow diagram(s). Photocopy this question and complete it separately for each process type.

CBI

[ ]

Process type ..... Adhesive Formulation

Process Stream ID Code	Media Affected[1]	Average Amount of Listed Substance Released[2]	Number of Batches/Year	Days of Operation/ Year
7G	A	UK	27	27
7H	NA	UK	27	27
7X	A	UK	2847	235
7Y	NA	UK	2847	235
7CC	NA	UK	2847	235
7FF	NA	.089 (A)	27	27
7II	NA	.024 (A)	2820	235

[1]Use the following codes to designate the media affected:

A = Air
B = Land
C = Groundwater
D = POTW
E = Navigable waterway
F = Non-navigable waterway
G = Other (specify) _____

[2]Specify the average amount of listed substance released to the environment and use the following codes to designate the units used to measure the release:

A = kg/day
B = kg/batch

[ ] Mark (X) this box if you attach a continuation sheet.

10.08 Describe the control technologies used to minimize release of the listed substance for each process stream containing the listed substance as identified in your process block or residual treatment block flow diagram(s). Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Adhesive Formulation

Stream ID Code	Control Technology	Percent Efficiency
7G	None	
7H	None	
7X	None	
7Y	None	
7CC	None	
7FF	None	
7II	None	

[ ] Mark (X) this box if you attach a continuation sheet.

PART B RELEASE TO AIR

10.09 Point Source Emissions -- Identify each emission point source containing the listed substance in terms of a Stream ID Code as identified in your process block or residual treatment block flow diagram(s), and provide a description of each point source. Do not include raw material and product storage vents, or fugitive emissic sources (e.g., equipment leaks). Photocopy this question and complete it separatel for each process type.

CBI

[ ]

Process type ..... Adhesive Formulation

Point Source ID Code	Description of Emission Point Source
7G	Materials Lab Mixer Vent
7X	Resin Application Lab Mix Area Vent

[ ] Mark (X) this box if you attach a continuation sheet.

[ ] Mark (X) this box if you attach a continuation sheet.

10.10 Emission Characteristics - - Characterize the emissions for each Point Source ID Code identified in question 10.09 by completing the following table.

CBI

[ ]

Point Source ID Code	Physical State[1]	Average Emissions (kg/day)	Frequency[2] (days/yr)	Duration[3] (min/day)	Average Emission Factor[4]	Maximum Emission Rate (kg/min)	Maximum Emission Rate Frequency (events/yr)	Maximum Emission Rate Duration (min/event)
7G	G	UK	39	90	NA	UK	39	UK
7X	G	UK	235	90	NA	UK	235	UK

[1]Use the following codes to designate physical state at the point of release:
G = Gas; V = Vapor; P = Particulate; A = Aerosol; O = Other (specify) _____

[2]Frequency of emission at any level of emission

[3]Duration of emission at any level of emission

[4]Average Emission Factor -- Provide estimated (± 25 percent) emission factor (kg of emission per kg of production of listed substance)

10.11 Stack Parameters -- Identify the stack parameters for each Point Source ID Code identified in question 10.09 by completing the following table.

CBI

[ ]

Point Source ID Code	Stack Height(m)	Stack Inner Diameter (at outlet) (m)	Exhaust Temperature (°C)	Emission Exit Velocity (m/sec)	Building Height(m)[1]	Building Width(m)[2]	Vent Type[3]
7G	4.572	(3.6576 x 4.2672)	21.1°	3.3	5.1816	152.4	H
7X	4.572	3.048	21.1°	.51	5.1816	152.4	H

[1]Height of attached or adjacent building

[2]Width of attached or adjacent building

[3]Use the following codes to designate vent type:

H = Horizontal
V = Vertical

[ ] Mark (X) this box if you attach a continuation sheet.

10.12 If the listed substance is emitted in particulate form, indicate the particle size distribution for each Point Source ID Code identified in question 10.09. Photocopy this question and complete it separately for each emission point source.

CBI

[ ]

NA

Point source ID code ..... _____

Size Range (microns)	Mass Fraction (% ± % precision)
< 1	
≥ 1 to < 10	
≥ 10 to < 30	
≥ 30 to < 50	
≥ 50 to < 100	
≥ 100 to < 500	
≥ 500	
	Total = 100%

[ ] Mark (X) this box if you attach a continuation sheet.

10.13 Equipment Leaks -- Complete the following table by providing the number of equipment types listed which are exposed to the listed substance and which are in service according to the specified weight percent of the listed substance passing through the component. Do this for each process type identified in your process block or residual treatment block flow diagram(s). Do not include equipment types that are not exposed to the listed substance. If this is a batch or intermittently operated process, give an overall percentage of time per year that the process type is exposed to the listed substance. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type .... Adhesive Formulation

Percentage of time per year that the listed substance is exposed to this process type ..... _____

NA

Equipment Type	Number of Components in Service by Weight Percent of Listed Substance in Process Stream					
	Less than 5%	5-10%	11-25%	26-75%	76-99%	Greater than 99
Pump seals[1]						
Packed						
Mechanical						
Double mechanical[2]						
Compressor seals[1]						
Flanges						
Valves						
Gas[3]						
Liquid						
Pressure relief devices (Gas or vapor only)						
Sample connections						
Gas						
Liquid						
Open-ended lines[5] (e.g., purge, vent)						
Gas						
Liquid						

[1] List the number of pump and compressor seals, rather than the number of pumps or compressors

10.13 continued on next page

[ ] Mark (X) this box if you attach a continuation sheet.

10.13 (continued)

[2]If double mechanical seals are operated with the barrier (B) fluid at a pressure greater than the pump stuffing box pressure and/or equipped with a sensor (S) that will detect failure of the seal system, the barrier fluid system, or both, indicated with a "B" and/or an "S", respectively

[3]Conditions existing in the valve during normal operation

[4]Report all pressure relief devices in service, including those equipped with control devices

[5]Lines closed during normal operation that would be used during maintenance operations

---

10.14 Pressure Relief Devices with Controls -- Complete the following table for those pressure relief devices identified in 10.13 to indicate which pressure relief devices in service are controlled. If a pressure relief device is not controlled, enter "None" under column c.

CBI

[ ] NA

a. Number of Pressure Relief Devices	b. Percent Chemical in Vessel[1]	c. Control Device	d. Estimated Control Efficiency[2]

[1]Refer to the table in question 10.13 and record the percent range given under the heading entitled "Number of Components in Service by Weight Percent of Listed Substance" (e.g., <5%, 5-10%, 11-25%, etc.)

[2]The EPA assigns a control efficiency of 100 percent for equipment leaks controlled with rupture discs under normal operating conditions. The EPA assigns a control efficiency of 98 percent for emissions routed to a flare under normal operating conditions

---

[ ] Mark (X) this box if you attach a continuation sheet.

10.15 Equipment Leak Detection -- If a formal leak detection and repair program is in place, complete the following table regarding those leak detection and repair procedures. Photocopy this question and complete it separately for each process type.

CBI

(NA)

[ ] Process type ..... Adhesive Formulation

Equipment Type	Leak Detection Concentration (ppm or mg/m^3) Measured at ___ Inches From Source	Detection Device[1]	Frequency of Leak Detection (per year)	Repairs Initiated (days after detection)	Repairs Complete (days afte initiated
Pump seals					
Packed					
Mechanical					
Double mechanical					
Compressor seals					
Flanges					
Valves					
Gas					
Liquid					
Pressure relief devices (gas or vapor only)					
Sample connections					
Gas					
Liquid					
Open-ended lines					
Gas					
Liquid					

[1]Use the following codes to designate detection device:

POVA = Portable organic vapor analyzer
FPM = Fixed point monitoring
O = Other (specify) _____

[ ] **Mark (X) this box if you attach a continuation sheet.**

10.16 Raw Material, Intermediate and Product Storage Emissions - - Complete the following table by providing the information on each liquid raw material, intermediate, and product storage vessel containing the listed substance as identified in your process block or residual treatment block flow diagram(s).

CBI

[ ] NA

Vessel Type[1]	Floating Roof Seals[2]	Composition of Stored Materials[3]	Throughput (liters per year)	Vessel Filling Rate (gpm)	Vessel Filling Duration (min)	Vessel Inner Diameter (m)	Vessel Height (m)	Operating Vessel Volume (l)	Vessel Emission Controls[4]	Design Flow Rate[5]	Vent Diameter (cm)	Control Efficiency (%)	Basis for Estimate[6]

[1]Use the following codes to designate vessel type:

F = Fixed roof
CIF = Contact internal floating roof
NCIF = Noncontact internal floating roof
EFR = External floating roof
P = Pressure vessel (indicate pressure rating)
H = Horizontal
U = Underground

[2]Use the following codes to designate floating roof seals:

MS1 = Mechanical shoe, primary
MS2 = Shoe-mounted secondary
MS2R = Rim-mounted, secondary
LM1 = Liquid-mounted resilient filled seal, primary
LM2 = Rim-mounted shield
LMW = Weather shield
VM1 = Vapor mounted resilient filled seal, primary
VM2 = Rim-mounted secondary
VMW = Weather shield

[3]Indicate weight percent of the listed substance. Include the total volatile organic content in parenthesis

[4]Other than floating roofs

[5]Gas/vapor flow rate the emission control device was designed to handle (specify flow rate units)

[6]Use the following codes to designate basis for estimate of control efficiency:

C = Calculations
S = Sampling

[ ] Mark (X) this box if you attach a continuation sheet.

PART E NON-ROUTINE RELEASES

10.23 Indicate the date and time when the release occurred and when the release ceased or was stopped. If there were more than six releases, attach a continuation sheet and list all releases.

NA

Release	Date Started	Time (am/pm)	Date Stopped	Time (am/pm)
1				
2				
3				
4				
5				
6				

10.24 Specify the weather conditions at the time of each release.

Release	Wind Speed (km/hr)	Wind Direction	Humidity (%)	Temperature (°C)	Precipitation (Y/N)
1					
2					
3					
4					
5					
6					

[ ] Mark (X) this box if you attach a continuation sheet.

10.27 Circle all appropriate responses relating to the cause and the effects of the release.

Release No. ..... NA _____

Cause of Release

Equipment failure .....

Operator error .....

Bypass condition .....

Upset condition .....

Fire .....

Unknown .....

Other (specify) _____ .....

Results of Release

Spill .....

Vapor release .....

Explosion .....

Fire .....

Other (specify) _____ .....

[ ] Mark (X) this box if you attach a continuation sheet.

APPENDIX I: List of Continuation Sheets

Attach continuation sheets for sections of this form and optional information after this page. In column 1, clearly identify the continuation sheet by listing the question numbe to which it relates. In column 2, enter the inclusive page numbers of the continuation sheet for each question number.

Question Number (1)	Continuation Sheet Page Numbers (2)
7.04	45 (2 sheets)
7.05	46 (4 sheets)
7.06	47 (2 sheets)

[ ] Mark (X) this box if you attach a continuation sheet.

APPENDIX II: Substantiation Form and Instructions to Accompany Claims of Confidentiality Under the Comprehensive Assessment Information Rule (CAIR)

If you assert one or more claims of confidentiality for information submitted on a Comprehensive Assessment Information Rule (CAIR) form, please answer, pursuant to 40 CFR 740.219, all the following questions in the space provided. Type all responses. If you need more space to answer a particular question, please use additional sheets. If you use additional sheets, be sure to include the section, number, and (if applicable) subpart of the question being answered, and write your facility's name and Dun & Bradstreet Number in the lower right-hand corner of each sheet. A completed copy of this form must accompany all submissions containing one or more claims of confidentiality. Failure to do so will result in the waiver of your claim of confidentiality.

EPA has identified six information categories as those which encompass all claims of confidentiality. These are: Submitter identity (h); Substance identity (i); Volume manufactured, imported, or processed (j); Use information (k); Process information (l); and Other information (m). Respondents who assert a CBI claim on the reporting form must mark the letter(s) (h through m) that represent(s) the appropriate category(ies) of confidentiality in the box adjacent to the question, and answer the questions in this form.

Respondents who assert a CBI claim for information submitted under CAIR must also provide EPA with sanitized and unsanitized versions of their submissions. The unsanitized version must be complete and contain all information being claimed as confidential. The sanitized copy must contain only information not claimed as confidential. EPA will place the second copy of the submission in the public file. Failure to submit the second copy of the form at the time the respondent submits the reporting form containing confidential information or after receipt of a notice from EPA thereafter will result in a waiver of the respondent's claim of confidentiality.

Please indicate the CAS Registry Number (if known) or chemical name (if the CAS Registry Number is not known) for the substance that is the subject of this form:

584-84-9

If you [illegible] a tradename, please provide the tradename for the substance that is the subject of this form:

Solithane 113

Does this form contain CBI? [ ] Yes [X] No

If the answer to this question is yes, you must bracket the text claimed as CBI. Any unbracketed information may be placed in the public file.

[ ] Mark (X) this box if you attach a continuation sheet.
